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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,194	12/21/2000	Tatsuya Ishii	040373/0301	7016

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EXAMINER

DEPPE, BETSY LEE

ART UNIT	PAPER NUMBER
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2637

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,194

Applicant(s)

ISHII, TATSUYA

Examiner

Betsy L. Deppe

Art Unit

2637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 3-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on December 9, 2004. These drawings are approved.

Response to Arguments

2. Applicant's arguments, see page 9, lines 6-23, filed December 9, 2004, with respect to claims 1-3 have been fully considered and are persuasive. The rejection of claims 1-3 has been withdrawn.

Claim Objections

3. The claims are objected to because of the following informalities:
 - in claim 3, line 4, "the remainder" should be "a remainder";
 - in claim 3, line 18, "bit" should be "bits";
 - in claim 4, line 5, "two first multiplier" should be "two first multipliers";
 - in claim 5, line 5, "two first multiplier" should be "two first multipliers";
 - in claim 6, line 5, there should be a comma after "second selectors";
 - in claim 7, line 4, "m times to form" should be inserted after "quantity." Based on the previous version of claim 7, it appears that this phrase was inadvertently omitted during the amendment.

in claim 7, line 5, there should be a comma after the first occurrence of “selectors”;

on line 3 of claims 8-10, the Examiner suggests deleting “by each stage” for improved readability; and

on line 15 of claims 10 and 11, there should be a comma after “second selectors.”

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 2, 4, 5, and 8-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. In claim 1, it is unclear how the input data and the delayed input data on lines 1-3 interacts with the gain regulation circuit.

7. In claim 2, lines 7-8, “said delayed input data selected by a third selector that selects said delayed input data from plural outputs of a shift register” is confusing. It is unclear whether the “delayed input data” referring to the outputs of shift register or to selected outputs of the shift register.

8. With regard to claims 4, 5, 8 and 9, it is unclear how the two circuits are operating as recited in claim 4, lines 8-9; claim 5, lines 9-10; claim 8, lines 18-20; and

claim 9, lines 18-20. For example, is each circuit simultaneously providing an output whereby each output that is generated by the respective circuits is changed at a rate of T/n ? Or is each of the circuits alternately providing the output signal which is subsequently processed?

It is also unclear what "output" in claim 4, line 8; claim 5, line 9; claim 8, line 19; and claim 9, line 19 is referring to. Is it referring to the output of one of the elements (e.g. the output of the first selector) comprising the "circuit" and/or the output of the circuit that is provided for subsequent processing? If it is the output of the overall circuit, it is unclear which of the elements provides this output, i.e. does the output of one of the selectors or one of the multipliers constitute the "output of the circuit."

9. With regard to claims 5, 8 and 9, it is unclear what is meant by "each of said two circuits handling a half divided load for each of said two first, two second and two third selectors and said two first and two second multipliers" in claim 5, lines 6-8 and lines 16-17 of claims 8 and 9. The Examiner suggests changing "a half divided load for each of said two first, two second and two third selectors and said two first and two second multipliers" to "half of the delayed data" for clarification and consistency with the detailed description.

10. With regard to claims 10 and 11, it is unclear whether the integrator on line 11 of the respective claims interfaces with a single second multiplier (see line 11) or a plurality of m second multipliers (see lines 15-16). The integrator on line 11 integrates the output of a single second multiplier whereas lines 15-17 recite a plurality of second multipliers (i.e. " m second multipliers").

Double Patenting


11. Applicant is advised that should claim 8 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betsy L. Deppe whose telephone number is (571) 272-3054. The examiner can normally be reached on Monday, Wednesday and Thursday (8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272 - 2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betsy L. Deppe
Primary Examiner
Art Unit 2637